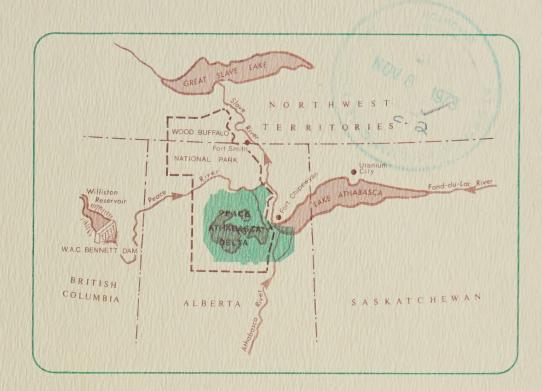
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PROSPECTUS

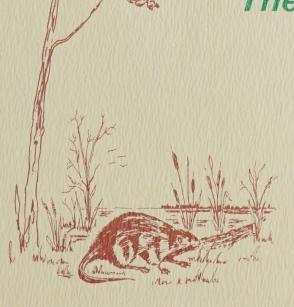


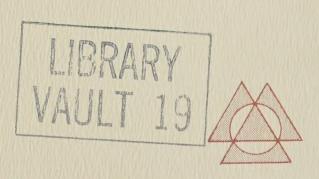


PUBLIC HEARINGS on

The Restoration of Water Levels in

The Peace Athabasca Delta





ENVIRONMENT CONSERVATION AUTHORITY

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Public Hearings on:
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# A PROSPECTUS

Alberta's Minister of the Environment the Honourable W.J. Yurko has requested the Environment Conservation Authority to hold public hearings regarding the Peace Athabasca Delta.

As the shorelines of Lake Athabasca also borders on Saskatchewan and on the federally administered Wood Buffalo National Park, all three Governments will participate in the hearings. Towards this end the Environment Conservation Authority will be joined for the occasion, by Mr. S.R. Blackwell of the Saskatchewan Department of the Environment and Mr. E.F. Durrant representing the Federal Government.

Hearings will be held at Fort Chipewyan on September 25th, at Uranium City, Saskatchewan, on September 27th, and at Edmonton on October 2nd, 1973.

# OBJECTIVE OF THE HEARINGS

In the spring and summer of 1970 it was noted that the delta appeared to be drying out. The wildlife was threatened and with it the livelihood of the many native people who lived and trapped in the area.

Similar changes in the past had always been reversed by floods in succeeding years. Now it appeared that the Bennett Dam constructed on the Peace River in 1968 was directly responsible for a reduction in water levels in Lake Athabasca and that natural flooding would no longer occur.

The primary purpose of the hearings will be to examine the recommendation by the Peace Athabasca Delta Project Group that a submerged weir be constructed on the Riviere des Rochers to restore the water levels in Lake Athabasca and the Delta as near as possible to their historical conditions.

# **PUBLIC INFORMATION**

For the information of the public, the summary report of the Peace Athabasca Delta Project Group entitled "The Peace Athabasca Delta - A Canadian Resource" will be freely available on request from the Authority. For those desiring more detailed information, the full report of the Project Group will be available for inspection at the offices of the Authority and its Information Centres as listed at the end of this Prospectus.

In addition, at the request of the Authority, the Department of the Environment has prepared a discussion paper on water management alternatives and this will be made available to the public in English and in Cree, prior to the Hearings.

# LOCATION OF THE PEACE ATHABASCA DELTA

The Peace Athabasca Delta is located at the West end of Lake Athabasca, west of the Canadian Shield, and lies largely in Wood Buffalo National Park. It is bounded by the Birch Mountains in the Southwest and the Caribou Mountains in the Northwest.

The area which comprises 1,475 square miles is formed by three smaller deltas, the Athabasca, the Peace and the Birch.

# THE VITAL WATER SYSTEM OF THE DELTA

Life in the Peace Athabasca delta evolves from a hydrological pattern which is characterized by the flooding of the area each year in June or July. The principal actors in this annual drama are Lake Athabasca, the Peace River, and the two main channels which inter-connect them, the Rivière des Rochers and the Chenal des Quatre Fourches.

Between April and mid-July each year the water levels in both the Peace River and Lake Athabasca rise as a result of the spring runoff. Since the level in the Peace River usually rises higher than that in the lake, the normal drainage of water to the river is prevented and water flows in the reverse direction to further increase the input to Lake Athabasca. Eventually, the lake overflows its banks and floods the entire area.

As the spring run-off subsides and the levels recede, the flood waters begin to drain away into the Peace River, and the Delta is once more exposed to resume its normal life pattern.

# BIOLOGICAL DEPENDENCE ON WATER LEVEL FLUCTUATIONS

The key to the Delta's unique character is the recurrent summer flooding followed by recession of the waters in the fall and winter. This not only serves to maintain the supply of ground and surface waters, but provides a flushing action for the salts which would otherwise accumulate during dry years.

In this type of landscape, sedges and grasses develop along the waters edge, whereas further away there are plants adapted to drier conditions, and eventually full forest communities.

A similar progression exists in wildlife populations. In the rich diversity of the delta environment over 215 species of birds, 45 kinds of mammals and 20 species of fish can be found.

The delta is a major breeding ground for thousands of ducks, geese and swans which provide food for the people of the area and are a valued resource throughout the continent as they replenish the four major flyways each year.

The annual replenishment of the delta marshes also supplies the conditions under which the muskrat can flourish and this has been a mainstay of trappers in the area both for meat and furs, for many years.

The largest free roaming heard of Bison in North America inhabits Wood Buffalo National Park where conditions closely resemble the primitive prairie grasslands in which their progenitors roamed. Moose inhabit the higher, forested areas and also provide an important resource for the inhabitants.

Of the many species of fish, the Goldeye and Walleye are of commercial importance in delta waters, whilst the Northern Pike is an important game fish, and Lake Trout is to be found in the deeper waters of Lake Athabasca.

## INTERIM GOVERNMENT ACTION

In response to general concern, the governments of Canada, Alberta and Saskatchewan combined to create the Peace Athabasca Delta Project. Under this Project the situation received exhaustive study and a recommendation was made for interim action. As a result an earthen dam was installed across the Chenal des Quatre Fourches by the Alberta Government in association with the National and Historic Parks Branch of the Federal Government.

This installation was designed to conserve water in lakes Claire and Mamawi and to promote some flooding and it has apparently served this purpose. The Chenal des Quatre Fourches channels only 10% of the water from Lake Athabasca and this dam could not be expected to have much of an effect on Lake Athabasca levels. It is therefore considered to be only an interim measure.

# MAJOR ALTERNATIVES AVAILABLE TO CORRECT THE PROBLEM

On the assumption that the main objective is to restore the levels of Lake Athabasca to approximately those prevailing prior to the construction of the Bennett Dam, some type of structure must be provided to replace the hydraulic dam effect of the Peace River.

Such a device should not only be capable of simulating the natural lake levels, but should also allow for free passage of fish, the flushing of the delta lakes and normal navigation. It must also be acceptable from the point of view of its downstream effects, silting or erosion of the Channel systems, ice problems, overall costs and operating demands.

From a consideration of several alternatives it appears that the most favourable choice would be for a permanent submerged weir to be installed at Little Rapids, on the Revière des Rochers.

### THE PUBLIC HEARINGS

In order to publicly consider the implications of the proposed weir structure, the Environment Conservation Authority is inviting all those who are concerned, or who have information of relevance to the subject, to attend its Public Hearings and submit their presentations.

It is expected that submissions will be made on the following aspects if the subject in particular:

- a) Downstream effects of the proposed weir, not only on the Slave River, but also beyond Great Slave Lake into the McKenzie River System.
- b) Modifications, additions, or supplimentary installations which might be considered necessary to avoid or minimize any adverse effects to the area or the interests of its inhabitants.

It is also expected that presentations will be made on alternative proposals and that there will be full discussion on the implications of the various alternatives, to the Delta itself, its flora and fauna, the lives of its people, and the downstream situation.

### INFORMATION CENTRES

Anyone wishing further information on the subject matter of these hearings is invited to contact:

The Environment Conservation Authority 9912 - 107 Street Edmonton, Alberta T5K 1G5 Phone 423-2247 or Zenith ZEO 6075

or to visit one of the Authority's Information Centres which may be found at the following locations:

### CALGARY

Calgary Regional Planning Commission, 204 Glenmore Trail, S.W. 252-8147

Calgary Public Library, 616 McLeod Trail, S.E. 263-1820

University of Calgary Library, Original Library Building, Environmental Design Area, 284-5954

Bureau of Public Affairs, J.J. Bowlen Building, 620-7 Ave, S.W. 268-8511

### CROWSNEST PASS

Blairmore Public Library, Town Office, 562-2332

Coleman Community Library, 563-3189

# CAMROSE

Camrose Public Library, 4863-50 Street, 672-4214

# CANMORE

Canmore Public Library, Town Hall, 678-5664

### DRUMHELLER

Drumheller Public Library, Centre Street

# EDMONTON

Environment Conservation Authority, 9912-107 Street, 423-2247

Edmonton Public Library, 102 Ave. & 100 St. 429-5351

University of Alberta Science Library, On Campus, 432-3785

University of Alberta Extension Library, On Campus, 432-3280

Provincial Library, 216 Legislative Building, 229-4313

# **EDSON**

Edson Public Library, Main Street & Sixth Avenue, 723-3117

# FORT CHIPEWYAN

Fort Chipewyan Post Office, 497-3658

# FORT McMURRAY

Fort McMurray Public Library, Box 753, 743-2121

### GRANDE CACHE

Community Service Centre, 827-3766

# GRANDE PRAIRIE

Peace River Regional Planning Commission, R.R. #2, Wapiti Road, 532-3813

Grande Prairie Public Library, 10332 - 100 Avenue, 532-2514

Grande Prairie Regional College Library, 10306 - 102 Street, 532-8855

# HINTON

Hinton Municipal Library, Hinton High School, 865-2363

### LETHBRIDGE

Oldman River Regional Planning Commission, 1003-4th Avenue S. 328-3371

Lethbridge Community College Library, 327-2141

Lethbridge Public Library, 3rd Avenue S. 327-3977 327-3375

University of Lethbridge Library, On Campus, 329-2261

# LLOYDMINSTER

Centennial Public Library, 4602-49 Avenue, 825-2618

# PEACE RIVER

Peace River Municipal Library, 10024-101 Street, 624-4076

# RED DEER

Red Deer Regional Planning Commission, 4910-59 Street, 346-3394

Red Deer Public Library, 4818-49 Street, 346-4576

Red Deer College Library, On Campus, 346-6450

# ROCKY MOUNTAIN HOUSE

I.O.D.E. Public Memorial Library, 845-2110

# WETASKIWIN

Wetaskiwin Public Library, City Hall, 352-4055

# WHITECOURT

Town Library, 778-2273



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